



**UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/108,447	07/01/98	COLEMAN	G 97-677

IM52/0506  
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EXAMINER

JOHNSON, J

ART UNIT

PAPER NUMBER

1721

DATE MAILED: 05/06/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trad marks**

# Office Action Summary

Application No.

09/108,447

Applicant(s)

Coleman et al.

Examiner

J. Johnson

Group Art Unit

1721

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—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-21 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-21 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_.

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 1721

The use of trademarks have been noted in this application. Trademarks should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim 21 of this application conflicts with claim 7 of Application No. 09/108,875. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

5 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 21 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 7 of copending Application No. 09/108,875. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

Art Unit: 1721

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 and 8-16 of copending Application No. 09/108,875. Although the conflicting claims are not identical, they are not patentably distinct from each other because while not of the same scope, both applications are directed to emulsions compositions having an average droplet diameter of less than about 10 microns comprising purified water and hydrocarbon petroleum distillate.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Art Unit: 1721

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dubin.

Dubin, U.S. Patent 5,284,492, teaches an enhanced lubricity water and fuel oil emulsion (column 3, lines 31-37). The emulsion can be either a water in fuel oil or a fuel oil in water emulsion (column 3, lines 41-44). The oil phase comprises a light fuel oil, by which is meant a fuel oil having little or no aromatic compounds and consists essentially of relatively low molecular weight aliphatic and naphthenic hydrocarbons (column 3, lines 45-49). Such fuels include fuels conventionally known as, *inter alia*, diesel fuel (column 3, lines 61-68). The emulsions advantageously comprise water-in-fuel oil emulsions having up to about 90% water by weight. The emulsions which have the most practical significance in applications when combusted alone are those having about 5% to about 50% water and are preferably about 10% to about 35% water-in-fuel oil by weight (column 4, lines 7-15). Although demineralized water is not required, the use of demineralized water in the emulsion is preferred (column 4, lines 30-35). The emulsions are prepared such that the discontinuous phase preferably has a particle size wherein at least about 70% of the droplets are below about 5 microns Sauter mean diameter. More preferably, at least about 85%, and most preferably at least about 90% of the droplets are below

Art Unit: 1721

about 5 microns Sauter mean diameter (column 4, lines 38-44). An emulsification system is most preferably employed to maintain the emulsion. A desirable emulsification system comprises about 25% to about 85% by weight of an amide, especially an alkanolamide or n-substituted alkyl amine; about 5% to about 25% by weight of a phenolic surfactant; and about 0% to about 40% by weight of a difunctional block polymer terminating in a primary hydroxyl group (column 5, lines 2+). The addition of a component selected from the group consisting of dimer and/or trimer acids, sulfurized castor oil, phosphate esters, and mixtures thereof significantly increase the lubricity of the emulsion (column 7, lines 15+). The addition of a corrosion inhibitor is taught in column 8, lines 56 to column 9, line 2).

As noted above, Dubin teaches a fuel oil emulsion which reasonably appears to be either the same as or an obvious variation of the instantly claimed emulsion. Accordingly, applicants' claims if not anticipated by 35 U.S.C. § 102, would have been obvious under 35 U.S.C. § 103.

Claims 8-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dubin as applied to claims 1-7 above, and further in view of Schwab and Cemenska et al.

Dubin is relied on as cited above, but differs from the instant claims in not teaching the addition of an antifreeze additive or an ignition delay modifier.

Schwab, U.S. Patent 5,669,938, teaches diesel fuel emulsions containing an emission reducing amount of at least one fuel-soluble organic nitrate ignition improver such as 2-ethylhexyl nitrate (abstract). The organic nitrate ester employed will fall in the range of about 500 to about 50,000 parts by weight of organic nitrate ester per mission parts by weight of the fuel.

Art Unit: 1721

Preferred concentrations usually fall within the range of 1,000 to 10,000 parts per million parts of fuel (column 3, lines 30-35). Other additives may be included within the fuel composition (column 4, lines 52-60).

Cemenska et al, U.S. Patent 5,873,916, teach diesel fuel emulsions containing, *inter alia*, anti-freeze inhibitors such as methanol (column 5, lines 3-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add the organic nitrate ignition improver of Schwab and the anti-freeze inhibitor of Cemenska et al to the diesel fuel emulsion of Dubin in order to provide their known benefit.

Claims 1-7 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Peter-Hoblyn et al.

Peter-Hoblyn et al (hereafter "Peter"), teach a water and diesel fuel emulsion containing up to about 70%, more preferably about 5% to about 70% water-in diesel fuel. Most preferably, the emulsion comprises about 15% to about 45% water in diesel fuel. The water which is used to form the emulsion is preferably demineralized water (column 2, line 53 to column 3, line 15). The emulsions are prepared such that the discontinuous phase preferably has a particle size wherein at least about 70% of the droplets are below about 5 microns Sauter mean diameter. More preferably, at least about 85%, and most preferably at least about 90% of the droplets are below about 5 microns Sauter mean diameter (column 3, lines 35-41). A desirable emulsification system comprises about 25% to about 85% by weight of an amide, especially an alkanolamide or n-substituted alkyl amine; about 5% to about 25% by weight of a phenolic surfactant; and about 0%

Art Unit: 1721

to about 40% by weight of a difunctional block polymer terminating in a primary hydroxyl group (column 4, lines 28+). The addition of a component selected from the group consisting of dimer and/or trimer acids, sulfurized castor oil, phosphate esters, and mixtures thereof significantly increase the lubricity of the emulsion (column 5, lines 47+). The addition of a corrosion inhibitor is taught in column 7, lines 28-41).

As noted above, Peter teaches a fuel oil emulsion which reasonably appears to be either the same as or an obvious variation of the instantly claimed emulsion. Accordingly, applicants' claims if not anticipated by 35 U.S.C. § 102, would have been obvious under 35 U.S.C. § 103.

Claims 8-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peter as applied to claims 1-7 above, and further in view of Schwab and Cemenska et al.

Peter is relied on as cited above, but differs from the instant claims in not teaching the addition of an antifreeze additive or an ignition delay modifier.

Schwab, U.S. Patent 5,669,938, teaches diesel fuel emulsions containing an emission reducing amount of at least one fuel-soluble organic nitrate ignition improver such as 2-ethylhexyl nitrate (abstract). The organic nitrate ester employed will fall in the range of about 500 to about 50,000 parts by weight of organic nitrate ester per million parts by weight of the fuel. Preferred concentrations usually fall within the range of 1,000 to 10,000 parts per million parts of fuel (column 3, lines 30-35). Other additives may be included within the fuel composition (column 4, lines 52-60).



Art Unit: 1721

Cemenska et al, U.S. Patent 5,873,916, teach diesel fuel emulsions containing, *inter alia*, anti-freeze inhibitors such as methanol (column 5, lines 3-11).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to add the organic nitrate ignition improver of Schwab and the anti-freeze inhibitor of Cemenska et al to the diesel fuel emulsion of Peter in order to provide their known benefit.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

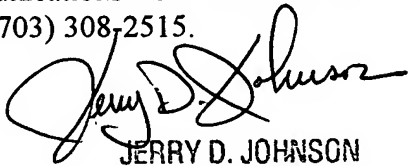
Claims 1-21 are rendered indefinite by the recitation of "purified water", i.e. the specification and claims fail to teach or define what is encompassed by the term "purified water". For example, it is unclear whether or not the term encompasses ordinary tap water.

Claims 10 and 21 contain trademark/trade names. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. § 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used to properly identify any particular material or product.

Art Unit: 1721

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry D. Johnson whose telephone number is (703) 308-2515.

  
JERRY D. JOHNSON  
PRIMARY EXAMINER  
GROUP 1100

JDJ  
April 26, 1999